The Flat World Swung Open: How Web Technology Is Revolutionizing Training and Education

Curtis J. Bonk, Professor, Indiana University
President, SurveyShare
cjbonk@indiana.edu
http://php.indiana.edu/~cjbonk

The Ten Forces that Flattened the World
Tripled Convergence: (1) new economic players, (2) playing fields, and (3) processes.
1. 11/9/89: Berlin Wall came down
2. 8/9/95: Netscape went public
3. Work Flow Software (e.g., PayPal and eBay)
4. Open Sourcing (Self organizes collateral communities; Mozilla, Apache, Wikipedia, Linux, Mozilla)
5. Outsourcing (Y2K)
6. Offshoring (e.g., China, Mexico, Thailand)
7. Supply Chain (e.g., Walmart)
8. Insourcing (UPS fixing Toshiba laptops)
9. In-forming (e.g., Google, Yahoo!, MSN Web Search)
10. The Steroids: Digital, Mobile, Personal, and Virtual (wireless, file sharing, VoIP, video camera in phones)

The World Is

Oregon Scientific Smartglobe

The Life of a Digital Nomad, July 24, 2009, Washington Post

[Image of various people and a map]
Poll #1: Bonk's Web Addiction Questionnaire (check all that apply)

1. Own 2 or more cell phones with Internet access.
2. Own 2 or more laptop computers with wireless connections.
3. Check email in the morning, noon, and at night.
4. Suffer from nervous tension when you cannot get on email.
5. Are checking email, updating your Facebook account, or text messaging right now.
Poll #2: If you had to pick your favorite way to learn, what would it be like?

- Face-to-face (FTF)
- Fully online
- Blended (combining online and FTF)
- Television, correspondence, or radio
- Self-study and self-service

Audience Participation!

1. WE
2. ALL
3. LEARN!!!
Norm Kamikow
Editor in Chief, CLO, April 2009, page 4

- Recently, I read a startling statistic: More than 53 trillion digital pages will exist online by 2010.
- I found this metaphor, based on commonly accepted measures of time, explaining order of magnitude between a million, a billion and a trillion. A million seconds was 12 days ago. A billion seconds ago, it was roughly May 1977, a span of 32 years. A trillion seconds ago, the Stone Age started.

WE-ALL-LEARN:
Ten Forces that Opened the Learning World
1. Web Searching in the World of e-Books (e.g., Darwin)
2. E-Learning and Blended Learning
3. Availability of Open Source and Free Software (e.g., Moodle)
4. Leveraged Resources and OpenCourseWare (e.g., MIT)
5. Learning Object Repositories and Portals (e.g., shared content)
6. Learner Participation in Open Info Communities (e.g., YouTube)
7. Electronic Collaboration and Interaction (async and sync)
8. Alternate Reality Learning (Online Massive Open Courses, Simulations, and Virtual Worlds, e.g., Second Life)
9. Real-Time Mobility and Portability (e.g., iPhone)
10. Networks of Personalized Learning (Oscar, RSS)
11. TECH-VARIETY
12. PC2022

Opener #1. Web Searching in the World of e-Books. What happens then? WE ALL LEARN!!!

Opener #1. Web Searching (e.g., Google, MSN, Yahoo!) in the World of e-Books (i.e., Darwin, Shakespeare, etc.)
This Could Be the Year of e-Textbooks
Many titles are available, but students are wary.
Jeffrey Young, September 1, 2009

Sign of the times: At the San Diego State U. bookstore, a poster exhorts students to "Buy This Textbook as an eTextbook."

E-books: 4 choices (Paperback, Kindle, iPhone, or iPod listening)

Digital Textbook in Korea
dictionary, email and forums, games, simulations, hyperlinks, multimedia, authoring, data search, study aids, evaluation, etc. (112 schools as of 2009; free for all schools by 2013)
http://www.dtbook.kr/eng/index.jsp

Free Online Books
(Terry Anderson and Fatih Elboumi. eds. Theory and Practice of Online Learning: Canada: Athabasca University. 2004),
http://cde.athabascau.ca/online_book/, (55,000 downloads in first year)

Global Text Project (free textbooks for those in less developed countries)
http://globaltext.org/
Opener #2. E-Learning and Blended Learning

Read, Listen, etc. to online books (e.g., "An International Episode" by Henry James)

Opener #2. E-Learning and Blended Learning. What happens then?

WE

ALL

LEARN!!!

Poll #3: Where will e-learning grow the most during the coming decade?
- Preschool and elementary school
- Middle and high school
- Community college level
- 4 year colleges and universities
- Corporate, government, and military training
- Informal adult learning
- Other
Teaching Under Fire and Online From 'Mortaritaville' in Iraq,
October 5, 2009, Chronicle of Higher Ed

Cheryl Wachenheim, an associate professor at North Dakota State U., was deployed to Iraq but decided to keep teaching her economics classes online.

"It was especially easy to teach about shortages and surpluses," she says. "When we heard that the base had Diet Mountain Dew, I can't even explain how exciting that was, and I could explain firsthand just what a shortage can do."
Blending Online and F2F Instruction

- Blended learning refers to events that combine aspects of online and face-to-face instruction" (Rooney, 2003, p. 26; Ward & LaBranche, 2003, p. 22)

If have a Strategic Plan...

- 60 percent share with employees
- 24 percent put on website for anyone to download
- 37 percent say it is working; another 27 percent say it is not working
- 70 percent say it is addresses online learning
- 47 percent say it addresses BL; 37 percent say it does not
- 32 percent say organization has a specific model or framework for BL; 48 percent say no

Which will promote blended learning the most?

| Increasing use of real world cases stories and examples in training | 34.58 |
| Increased collaboration, community building, and global connectedness | 26.17 |
| Increasingly individualized or personalized e-learning | 11.21 |
| Increasing focus related to on-demand learning | 9.35 |
| Learners/employees making their own learning decisions | 8.41 |
| The blurring of the lines between work and learning | 8.41 |
| Increased use of hand-held and mobile devices | 1.87 |

AMA Special Report, Blended Learning Opportunities
Alison Rossett (2006)

1. Anchor Blend: Start FTF, then online
2. Bookend Blend: Three part: e.g., online preassessments, then FTF, and then online post assessments
3. Field Blend: Assets, resources, and choices including perhaps FTF

AMA Special Report, Effectively Implementing a Blended Learning Approach
(Steven Shaw & Nicholas Ineri, 2006)

AMA at Work: Lifelong learning, lifelong growth

Source: American Management Association, AMA at Work
Framework for organizational development through training

Assess, Learn, and Apply
(Copyright Microsoft, Zibb & Mosher, in press; Handbook of Blended Learning Environments)

Blended Learning Form Factors
(Copyright Microsoft, Zibb & Mosher, 2006; Handbook of Blended Learning Environments)

<table>
<thead>
<tr>
<th>Tools for learning communities</th>
</tr>
</thead>
<tbody>
<tr>
<td>Live instructor-led</td>
</tr>
<tr>
<td>Self-paced learning</td>
</tr>
<tr>
<td>Chat</td>
</tr>
<tr>
<td>Chat</td>
</tr>
<tr>
<td>Instant messaging (IM)</td>
</tr>
<tr>
<td>Newsgroups and forums</td>
</tr>
<tr>
<td>Collaboration</td>
</tr>
</tbody>
</table>

Blended Learning Scenario
(Copyright Microsoft, Zibb & Mosher, 2006; Handbook of Blended Learning Environments)

<table>
<thead>
<tr>
<th>Activity</th>
<th>Self Study</th>
<th>In Classroom</th>
<th>Virtual Class</th>
<th>E-Learning</th>
<th>In Classroom</th>
<th>Community Newsgroups</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Self Study</td>
<td>In Classroom</td>
<td>Virtual Class</td>
<td>E-Learning</td>
<td>In Classroom</td>
<td>Community Newsgroups</td>
</tr>
</tbody>
</table>

Specific Learning Elements
An Learning Ecology from Sun Microsystems
(Wenger & Ferguson, 2006)

<table>
<thead>
<tr>
<th>Learner Self-Navigation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Authentic tasks</td>
</tr>
<tr>
<td>Role-play</td>
</tr>
<tr>
<td>Projects</td>
</tr>
<tr>
<td>Case Studies</td>
</tr>
<tr>
<td>Peer Discussions</td>
</tr>
<tr>
<td>Discussions through Worms</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Content Delivery Focus</th>
</tr>
</thead>
<tbody>
<tr>
<td>Classroom lectures</td>
</tr>
<tr>
<td>Workshop exercise</td>
</tr>
<tr>
<td>Problem-solving exercises</td>
</tr>
<tr>
<td>Videos</td>
</tr>
<tr>
<td>Simulations</td>
</tr>
</tbody>
</table>

Current Learning Elements
An Learning Ecology from Sun Microsystems

<table>
<thead>
<tr>
<th>Current Learning Elements</th>
</tr>
</thead>
<tbody>
<tr>
<td>Classroom (instructional) context</td>
</tr>
<tr>
<td>Self-paced web content</td>
</tr>
<tr>
<td>Self-study guides</td>
</tr>
<tr>
<td>Certification</td>
</tr>
<tr>
<td>Practice test</td>
</tr>
<tr>
<td>Diagnostics</td>
</tr>
<tr>
<td>Off-site mentoring</td>
</tr>
<tr>
<td>Asynchronous discussion forums</td>
</tr>
<tr>
<td>Documental</td>
</tr>
<tr>
<td>Procedural job aids</td>
</tr>
<tr>
<td>Guided lab activities</td>
</tr>
<tr>
<td>Learning management system</td>
</tr>
<tr>
<td>Transfer of Information – recorded audio and slide presentations</td>
</tr>
<tr>
<td>Webcasts</td>
</tr>
<tr>
<td>Video</td>
</tr>
<tr>
<td>Performance Support</td>
</tr>
</tbody>
</table>

"The IBM Four Tier Learning Model (2006)
The IBM Blending Learning for Business Impact – IBM's case for learning success, 2006 Handbook of Blended Learning, Nancy Lewis, VP, & Peter Orton, IBM"
2 Million People Sign up for Part I of Oprah's Course on Spiritualism (Skype; 500,000 simultaneous video streams, March 2008)

Indiana University High School
(4,000 students and 1,400 enrolled in diploma programs)

Adora Svitak, age 12, World's Youngest Teacher

Total and Online Enrollment in Postsecondary Institutions
Fall 2002 through Fall 2006

<table>
<thead>
<tr>
<th>Year</th>
<th>Total Enrollment</th>
<th>On-Campus</th>
<th>Online</th>
<th>Total Online Enrollment</th>
</tr>
</thead>
<tbody>
<tr>
<td>Fall 2002</td>
<td>18,817,730</td>
<td>18,323,279</td>
<td>492,451</td>
<td>7,587,953</td>
</tr>
<tr>
<td>Fall 2003</td>
<td>18,788,435</td>
<td>18,295,655</td>
<td>482,780</td>
<td>7,200,764</td>
</tr>
<tr>
<td>Fall 2004</td>
<td>18,771,245</td>
<td>18,286,515</td>
<td>484,730</td>
<td>7,087,151</td>
</tr>
<tr>
<td>Fall 2005</td>
<td>18,859,023</td>
<td>18,342,023</td>
<td>517,000</td>
<td>7,524,000</td>
</tr>
<tr>
<td>Fall 2006</td>
<td>18,947,273</td>
<td>18,384,273</td>
<td>563,000</td>
<td>8,000,000</td>
</tr>
</tbody>
</table>

Free and Open Courses
(Tom Reeves Evaluation Courses at Georgia; David Wiley's Web 2.0 courses at BYU; Connectivism from George Siemens and Stephen Downes, 34 enrolled, 2,000+ sitting in)

A Grain of Rice: A Bloomington man's computer vocab game feeding the world
Herald Times, Wednesday
February 6, 2008, Mike Leonard
Opener #3. Availability of Open Source and Free Software (e.g., Linux, Apache, Moodle, Sakai)

Opener #3. Availability of Open Source and Free Software. What happens then?

WE

ALL

LEARN!!!

Mitch Kapor
Poll #4: Which of these have you heard or or used?

1. Angel
2. Blackboard
3. Desire2Learn
4. eCollege
5. Moodle
6. Sakai
7. WebCT
8. Other
9. None

Moodle (620,000 registered users in 204 countries speaking 78 languages, 2/10/2009)

Opener #4. Leveraged Resources and OpenCourseWare (OCW) (e.g., free courses from MIT, Utah State, CORE, OOPS)

The Sakai Project (over 100 organizations today, Sakai Project began in 2004 when Stanford, Michigan, Indiana, MIT, and Berkeley)
Open Educational Resources (OER)
Post Courses in YouTube and iTunes (e.g., Berkeley)

OpenCourseWare (OCW)
Cute Kitten or Transformation? (per George Siemens)
National Repository for Online Courses (NROC) Commons

Academic Earth
http://academicearth.org/
Thousands of video lectures from the world's top scholars.

Cape Town Open Education
Declaration, Dec 2007
http://www.capetowndeclaration.org/

Peer2Peer University and University of the People (free!)
Neeru Paharia is behind Peer2Peer University, Fast Company, September 2009, How Web-Savvy Edupunks Are Transforming American Higher Education

Opener #5. Online Learning Object Repositories and Portals (shared content)
From left, three views of a fragment of one of the Dead Sea Scrolls: a plain digital image, a color scan and an infrared scan. August 27, 2008, Israel to Display the Dead Sea Scrolls on the Internet, By ETHAN BRONNER, The New York Times


Tracking Live Internet Thawing:
A Colossal of an Idea

Deep-Sea Behemoth
Captain John Bremett examines the world's first intact adult male colossal squid on board his New Zealand fishing boat in February, 2007, in the Ross Sea near Antarctica. The gigantic sea creature weighs a world record 1,089 pounds. After being frozen whole for over a year, scientists at New Zealand's national museum will thaw the squid for further study.

Ida (a transitional species)
47-Million-Year-Old Darwinius Masillae Fossil the Missing Link? (wowOwow, May 20, 2009)

The Complete Works of Charles Darwin and Shakespeare

The Carlyle Letters Exploring Victorian World Through Letters and The Diary of Samuel Pepys
(Great Plague, Great Fire, Charles Dickens, Samuel Pepys, Mary Robinson, Robert Browning, John Stuart Mill, Ralph Waldo Emerson, Elizabeth Barrett Browning, and Alfred Tennyson)
Referatory: MERLOT.org
(74,500 members, 23,300 learning materials, October 6, 2009)

Repository: Connexions Growth
January 2009

>8,000 modules (3-5 pages)
>425 collections (books and courses)
multiple languages
engineering, computer science, nanotech, physics, statistics, math, history, music, bio-diversity, botany, bio-info, IP, BRIT, UNESCO, UN, Sigma XI, ...
from authors worldwide

Usage metrics:
15 million hits,
2m page views,
1m unique users
from 200 countries

Opener #6. Learner Participation in Open Information Communities (e.g., Slashdot, Digg, Wikipedia, YouTube)

The Learning World is Open
7 Effective Wiki Uses and the Companies that Benefit from Them
http://www.idw.org/2008/01/08/7-effective-wiki-uses-and-the-companies-that-benefit-from-them/

- SAP: On the SAP Developer Network Wiki, the "main criteria for choosing to put content in the wiki is its volatility and dynamics, extendability and/or collaborative character. Ask yourself the question, if you want others to be able to change, extend, regroup, add, etc. your contribution." That's an excellent question to ask, especially for content that's going on a public wiki.

Poll #5: Which of the following resources from the Wikimedia Foundation have you used (check all that apply)

1. Wikibooks
2. Wikicommons
3. Wikinews
5. Wikiquote
6. Wikisource
7. Wikispecies
8. Wikiversity
9. Wiktionary

Conference to Conference
(You Ustreamed my Ustream: Now that's a Twitter of an Idea)
What makes a YouTube video motivating?

Employee Film Competitions (why accounting/finance is great!)

How to Start a Business

Shared Online Video (e.g., YouTube and the Royal Channel)

Individual Produced Videos (e.g., African School Dream in Current TV)
http://current.com/items/77146693_african_school_dream

TV Lesson (How-to lessons from experts: 1,000's of instructional videos and articles; http://www.tvlesson.com/)
Poll #5: Which shared online video resources have you used or seen used in teaching? (check all that apply)

1. BBC News Video and Audio
2. CNN.com Video
3. Current TV
4. Fora TV
5. Google Video
6. Link TV
7. MIT World
8. MSNBC.com
9. NASA TV
10. TeacherTube
11. YouTube
12. YouTube Edu

Brand New E-Book and Print book
Opening Up Education
New Edited Book from MIT (free PDF, sample chapters, and hardcopy)
http://ocw.mit.edu/catalog/meeting/15-008Ksummer09

Self-Publishing (print-on-demand)
BookSurge (owned by Amazon), Lulu

Participatory E-Books

dotSUB (subtitling video)
Iran after the June Election

October 21, 2009
The Next Generation of Videoconferencing
Voxopop (audio threaded conversations)  
http://www.voxopop.com/

Flat Classroom Projects!!! (combine blogs, videoconferencing, chat, async discussion, etc.)

EPals and iEARN (International Education and Resource Network)

TutorVista has 600 tutors in India and 10,000 subscribers in the United States, including Kenneth Tham in Arcadia, Calif.

Teaching other to blog (Hole-in-the-Wall) technology

Ice Stories Project from Antarctica
1kg More Project for Rural China
(http://www.1kg.org/)

Opener #8. Alternate Reality Learning (Online Massive Gaming, Simulations, and Virtual Worlds; e.g., Second Life)

Massive Multiplayer Online Gaming (MMOG)

WisdomTools and Info in Place
http://infoinplace.com/Extranet/LearningServices/
Healthcare in Second Life
http://robinashford.posterous.com/

Second Life
(business, law, education, English, medicine)

Opener #9. Real-Time Mobility and Portability.
What happens then?

WE
ALL
LEARN!!!

Opener #9. Real-Time Mobility and Portability (e.g., iPhone, low cost wireless devices)
Alexandria in our Pockets! What if every early elementary kid could have a terabyte (1,000 gigabytes or 1 trillion bytes) of data on a thumb drive? (Wired Magazine, October 26, 2007 says it will be possible in a few years; research from Arizona State)

Terabyte thumb Drives and Magic Pens! (The Pulse from Livescribe, $129–$169)

Poll #7: Would you buy a Pulse pen?
1. Yes
2. Maybe
3. No, too expensive
4. No, too technical
5. No, waiting for advancements in the technology
6. No, no need
7. Not interested

Mobile Learning
(April 21, 2009, USA Today)

Ocarina, Leaf Trombone lead big parade of iPhone apps, April 21, 2009, USA Today
Jefferson Graham
- Their Ocarina, a 99-cent application that turns the iPhone into a virtual flute, has become one of the iPhone's best-selling apps — to the tune of nearly $800,000. Now out is the sequel, the Leaf Trombone World Stage.
- "We believe in the potential of interactive sound; we believe that everyone is inherently creative; and we want to unlock that creativity in everyone," says Wang, 31. "We want to find new types of ways to connect people, using the technology we have before us."
Pull yourself away from that iPhone and read this story
By Mary Gregory Marcus, USA Today, October 5, 2006
http://www.usatoday.com/lifestyles/tech/2006/10/05/iphone-edu_05.htm

- 50 million iPhone users and 85,000 applications.

Mobile Learning in India with Paul Kim

Africa is Going Mobile!
40,000 new mobile subscribers a week in Rwanda; Rwanda Newtimes report, January 2009
Africa is the continent with the fastest growth, where penetration has soared from just one in 50 people at the turn of the century to 28%. International Telecommunications Union (ITU), March 2009
India: In 2008, 74 new mobile subscribers a month. In January, 2009, the number skyrocketed to 5.4M (Growth was driven by people in the poorest region)
Globally: 60,000 new mobile subscriptions every hour!

One Laptop Per Child Foundation (OLPC)
(How about a $12 laptop?)

Opener #10. Networks of Personalized Learning. What happens then?
WE ALL LEARN!!!
USA Today, Jon Swartz, For social networks, it's game on, USA Today, Thursday October 15, 2009

Facebook: The New Classroom Commons?, Chronicle of HE, Harriet L. Schwartz, Sept. 28, 2009

T&D, Marjorie Derven, July 2009

Create a Social Networking Group (MySpace, Facebook, LinkedIn)

Podcast Shows TWIT (This Week in Tech)
http://live.twit.tv/

Live Happy Practitioner Directory
http://www.signalpatterns.com/practitioner
Learning Towns are Popping up!

ChinesePod, ItalianPod, SpanishPod, FrenchPod, and EnglishPod

Livemocha (29 languages, 160 hours of lessons, over 2 million users, FREE!)  

Poll #7: If you had one language to learn online which would it be?  
1. Arabic  
2. Chinese  
3. English  
4. French  
5. German  
6. Hindi  
7. Japanese  
8. Korean  
9. Russian  
10. Spanish  
11. Italian  
12. Other  

Some Online Motivational Ideas

TEC-VARIETY Model for Online Motivation and Retention  
1. Tone/Climate: Psych Safety, Comfort, Belonging  
2. Encouragement, Feedback: Responsive, Supports  
3. Curiosity: Fun, Fantasy, Control  
4. Variety: Novelty, Intrigue, Unknowns  
5. Autonomy: Choice: Flexibility, Opportunities  
6. Relevance: Meaningful, Authentic, Interesting  
7. Interactive: Collaborative, Team-Based, Community  
8. Engagement: Effort, Involvement, Excitement  
9. Tension: Challenge, Dissonance, Controversey  
10. Yields Products: Goal Driven, Products, Success, Ownership
1. Tone/Climate: A. Video Course Intros (examples from Northern Virginia Community College and Indiana University KD (online MBA) program)

2. Encouragement, Feedback, etc.: A. Instructor Presentation in Synchronous Sessions (Breeze, Elluminate, WebEx, etc.)

2. Encouragement, Feedback, etc.: B. Learner Content Interaction (games): Business & Healthcare Examples (Option 6)

2. Encouragement, Feedback, etc.: C. Learner Content Interaction (problems): Business & Healthcare Examples (Option 6)

2. Encouragement, Feedback, etc.: D. Online Simulation: Financial Accounting; (University of Calgary)

2. Encouragement, Feedback, etc.: E. Tutorials with Screen Capture (e.g., Jing, Screencast)
2. Encouragement, Feedback, etc.: F. Sharing Your Slides, Syllabus, Notes, Documents, etc. (e.g., SlideShare)

3. Curiosity, Fun:
   A. Exploration and Demonstration: Virtual Tours and Timelines (HyperHistory)
   http://simile.mit.edu/timeline/

4. Variety, Novelty:
   A. Supplementing Course with Health Resources (portals, referatories, & repositories)

4. Variety, Novelty:
   B. Creating your own instructor videos (Animoto, Videospin, Windows Movie Maker)

4. Variety, Novelty:
   C. Adding voice to email, docs (Yack Pack, VoiceThread)

4. Variety, Novelty:
   D. Supplemental information (e.g., BookTV; http://www.booktv.org/)

35
5. Autonomy, Choice: A. Online Literature Search (Class Google Jockeys) (links to text, soundtracks, video clips, etc.)

5. Autonomy, Choice: B. Clickers; Innovation is but one click away...

6. Relevance, Meaningfulness: A. Mobile News (New York Times): A new way to take your news with you on the iPhone and iPod touch

6. Relevance, Meaningfulness: B. A Blended Case Example – Krispy Kreme Management 101

6. Relevance, Meaningfulness: C. A Blended Case Example – Lilly Strategic Negotiation Training

6. Relevance, Meaningfulness: D. Wisdom Tools (scenario learning)
7. Interactive, Collaborative:
   A. Online Language Learning
      (ECpod, Mixxer, Livemocha, Babbel, KanTalk)

7. Interactive, Collaborative:
   B. Collaborative Groups (Ning, Google Groups, MSN Groups, Yahoo Groups, Diigo)

7. Interactive, Collaborative:
   C. Collaborative Documents (Google Docs)

8. Engagement, Effort:
   A. Synchronous and Asynchronous Events
      (e.g., Breeze + Video + Online Forum + Online Papers)

9. Tension, Challenge, etc.:
   A. Online Role Play of Famous People, Mock Trial, Debates, etc.
      • Enroll famous people in your course
      • Students assume voice of that person for one or more sessions

9. Tension, Challenge, etc.:
   B. Electronic Guests & Mentoring
      (my eCoach, Tripio Creek mentoring)
9. Tension, Challenge, etc.: C. Ethical Medical Debates
Students to protest human body exhibit

10. Yields Products, Goals: A. Movie Festivals, Concept Maps, Video Papers, Virtual Timelines, Digital Movies

Poll #4: How many ideas did you get so far?
1. 0 if I am lucky.
2. Just 1.
3. 2, yes, 2...just 2!
4. Do I hear 3? 3!!!
5. 4-5.
6. 5-10.

Part II: Addressing Learning Styles

The R2D2 Method
1. Read (Auditory and Verbal Learners)
2. Reflect (Reflective Learners)
3. Display (Visual Learners)
4. Do (Tactile, Kinesthetic, Exploratory Learners)
1. Auditory or Verbal Learners

- Auditory and verbal learners prefer words, spoken or written explanations.

Read 1a. Course Announcements (e.g., Teaching with Twitter)

Poll #8: Podcast Questions
1. Have you listened to a podcast?
2. Do you listen to a certain podcast on a regular basis?
3. Have you created a podcast?
4. Have you created a vodcast?
5. Do you think podcasting is simply more talking heads?

Read 1b. University Podcast Shows
(School of Dentistry, Univ of Michigan) Educause Quarterly, 29(3), 2006

Read 1c. Wiki Steps on How to do Something: Wikihow
http://www.wikihow.com/

2. Reflective and Observational Learners

- Reflective and observational learners prefer to reflect, observe, view, and watch learning; they make careful judgments and view things from different perspectives
Reflect 2a. Blogs Uses
1. Instructor or Tutor blog: resources, information, space to chat
2. Learner blog: reflections, sharing links and pics, fosters ownership of learning
3. Partner blog: work on team projects or activities
4. Class blog: international exchanges, projects, PBL
5. Revision: review and explore sentences from previous posts, add details
6. Nutshell: summarize themes or comments across blogs
7. Blog on blog: reflections on feelings, confusions, and experiences with blogs

Reflect 2b. Expert and Domain Specific Blogs (Health and Business Blogs)

Reflect 2c. Watch or Listen to Online Conferences

Reflect 2d. Business and Medical Cases Online (problems, solutions, etc.)

3. Visual Learners
- Visual learners prefer diagrams, flowcharts, timelines, pictures, films, and demonstrations.

Display 3a. Anchored Instruction (find anchoring event (YouTube, CNN, BBC, TeacherTube, CurrentTV)
- In a synchronous lecture interrupt it with a summary video (could be a movie clip) explaining a key principle or concept.
- Refer back to that video during lecture.
- Debrief on effectiveness of it.
Display 3b. Medical Animations and Videos (find anchoring event: YouTube, CNN, BBC, TeacherTube, CurrentTV)

Display 3c. Online Timelines (US Presidents)

Display 3d. Concept Mapping and Timeline Tools (VUE, Bubbl.us, Cmap, Freemind, Gllify, Mindmeister, or Mindomo)

Display 3e. Flash, 3-D Visualization, & Laboratory Software

Display 3f. United Nations Opens World Digital Library, April 21, 2009

Display 3g. Vodcast for Medical Training
e.g., "Sonosite on the small screen: The Bothell-based company uses podcasts for its ultrasound scanner training."
By Eric Fessler, Herald Writer Everett, WA, Sept 25, 2006

Dan Bates / The Herald, Sept 25, 2006
David Levesque, vice president of global learning at Sonosite in Bothell, demonstrates the company's new podcast training for ultrasound technicians.
Display 3h. Peer Critique in Breeze
(Table of Benefits of Peer Critique; Park & Bonk, 2007)

Display 3i. Map Mash-ups
(e.g., Shakespeare's Global Globe Project, June 13, 2008; Michael Seher
GOOGLE EARTH ENVIRONMENT GUIDE: THE FREE SOFTWARE FROM GOOGLE
GIVES SCIENTISTS A NEW WORLD VIEW)

Display 3j. Human Embryology Animations
(Valerie O’Loughlin, Indiana University)

Display 3k. Broadcast Surgeries
Evaluating an In-Vivo Surgical Training Demonstration over Broadband Internet
Dinesh Pillai
CISPA DTU, Denmark
Departments of Surgical Science, Aalborg \& Aarhus University
CISPA DTU, Denmark, Aalborg, 2011
Andreas@cispa.dtu.dk

Display 3l. Shared Online Video
(e.g., Howcast, WonderHowTo, Clip Chef)

Display 3m. Download and Use Online 3D Sketches (Google SketchUp; download http://sketchup.google.com/3dwarehouse)
4. Tactile/Kinesthetic Learners

- Tactile/kinesthetic senses can be engaged in the learning process are role play, dramatization, cooperative games, simulations, creative movement and dance, multi-sensory activities, manipulatives and hands-on projects.

Poll #9: Wiki Questions
(check all that apply)
1. I regularly read Wikipedia articles just for fun.
2. I have read one or more Wikibooks.
3. I seek out Wikipedia for content.
4. I have edited or written new articles on Wikipedia or Wikibooks.
5. I think it is ok for college students to cite from Wikipedia.

Do 4a. Wikibooks: International Collaboration (Web 2.0 and Emerging Learning Technologies (The WELT))

Do 4b. Survey Research and Market Analysis
(e.g., Mister Poll, MicroPoll, Zoomerang, SurveyShare)

Do 4c. Online Warm-ups Activities
Just-In-Time-Teaching (JITT)
http://webphysics.iupui.edu/jitt/jitt.html

Do 4d. Online Performances
Virtual Worlds/Reality/MMOG
(e.g., Shakespeare plays reenacted)
Do 4e. Syllabus, Glossary, etc. in wiki: Students sign up for tasks (Ron Owston, York University)

Read 1f. Podcasts for students of pronunciation class (e.g., Tzu-Su Chen, Taiwan)

Do 4g. Educational Simulations (Medical Traumas from TD Magazine, Cells Alive)

Do 4h. Real World Problems (PBL online): Real-time Cases

U.S. Food Force, called the first humanitarian game, simulates problems of getting supplies to wartime refugees.

Poll #10: How many ideas did you get from the second part of this talk?

a. None—you are an idiot.
b. 1 (and it is a lonely #).
c. 2 (it can be as bad as one).
d. 3-5
e. 6-10
f. Higher than I can count!

Do 4i. Video Scenario Learning (Option Six, Wisdom Tools)
Try the R2D2 Method!!!
Try TEC-VARIETY!!!

Sample papers:
http://www.publicationshare.com/
Archived talks:
http://www.trainingshare.com/

Predictions
1. Five Billion "Have-Nots" Have at It!
2. Emergence of Lifelong Super E-Mentors/Coaches
3. Quarter-Century Learning Clubs
4. Terabyte Learning Access Points
5. The Veneration of Learning
6. Personalization + Portfolios
7. The Selection of Global Learning Partners
8. The Shared Learning Era
9. Teaching-Learning Perpetuities
10. Teachers, Teachers
11. The Rise of the Super Blends
12. Self-Determined Humans
13. Free Learning Zones
14. Authentic Learning Amalgamations
15. Alexandrian Aristotics

Slides at: TrainingShare.com
Papers: PublicationShare.com
Book: http://worldisopen.com/
The World is Open.
What happens then?
WE ALL LEARN!!!